

Form PTO-1390  
P21989.P01U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICETRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371U.S. APPLICATION NO. (If known, see 37 CFR  
1.5)**10/049626**

INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DATE	PRIORITY DATE CLAIMED
PCT/JP00/05711	24 August 2000	25 August 1999

TITLE OF INVENTION  
METHOD OF DETECTING AND QUANTITATING MICROORGANISM HAVING SPECIFIC FUNCTION AND ITS GENE FROM NATURAL ENVIRONMENT, NOVEL 16 SrRNA GEE DATA AND PROBES

## APPLICANT(S) FOR DO/EO/US

Akihiko MARUYAMA, Takanori HIGASHIHARA, Hiroyuki ISHIWATA, and Tsunemi FUJITA

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information.

1.  This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.
2.  This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.
3.  This is an express request to promptly begin national examination procedures (35 U.S.C. 371(f)).
4.  The US has been elected by the expiration of 19 months from the priority date (PCT Article 31).
5.  A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a.  is attached hereto (required only if not communicated by the International Bureau).
  - b.  has been communicated by the International Bureau.
  - c.  is not required, as the application was filed in the United States Receiving Office (RO/US).
6.  An English language translation of the International Application as filed (35 U.S.C. 371 (c)(2)).
7.  Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a.  are attached hereto (required only if not communicated by the International Bureau).
  - b.  have been communicated by the International Bureau.
  - c.  have not been made; however, the time limit for making such amendments has NOT expired.
  - d.  have not been made and will not be made.
8.  An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3))
9.  An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
 

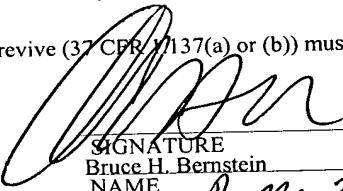
"Unexecuted"
10.  An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (U.S.C. 371(c)(5)).

## Items 11 to 16 below concern other document(s) or information included:

11. Assignee: NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY of Tokyo, JAPAN

12.  An Information Disclosure Statement under 37 CFR 1.97 and 1.98.13.  An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.14.  A FIRST preliminary amendment.  
 A SECOND or SUBSEQUENT preliminary amendment.15.  A substitute specification.16.  A change of power of attorney and/or address letter.17.  Figure of Drawing to be published \_\_\_\_\_18.  Other items or information:  
Cover Sheet and International Application as published in Japanese.  
PCT/RO/101-PCT Request(in Japanese).  

- PCT/IB/304.
- PCT/IB/308.
- PCT/IB/338.
- PCT/IPEA/409(in English and Japanese).
- PCT/IPEA/416(in Japanese).
- PCT/ISA/210(in English and Japanese).
- Paper Copy of Sequence Listing.
- Computer-Readable Copy of Sequence Listing.
- Cover Letter under 35 U.S.C. 371 and 1.495.
- Claim of Priority.

U.S. APPLICATION NO. (If known, see 37 CFR 1.5) <b>10/04962</b>		INTERNATIONAL APPLICATION NO. PCT/JP00/05711	ATTORNEY'S DOCKET NUMBER T21989																																
19. The following fees are submitted:		CALCULATIONS	PTO USE ONLY																																
<p>Basic National Fee (37 CFR 1.492(a)(1)-(5)):</p> <p>Search report has been prepared by the EPO or JPO. .... \$ 890.00</p> <p>International preliminary examination fee paid to USPTO (37 CFR 1.482). .... \$ 710.00</p> <p>No international preliminary examination fee paid to USPTO (37 CFR 1.482) but international search fee paid to USPTO(37 CFR 1.445(a)(2)). .... \$ 740.00</p> <p>Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2) paid to USPTO. .... \$1,040.00</p> <p>International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2)-(4). .... \$ 100.00</p>																																			
ENTER APPROPRIATE BASIC FEE AMOUNT =																																			
\$890.00																																			
<p>Surcharge of \$130.00 for furnishing the oath or declaration later than ___ 20 ___ 30 months from the earliest claimed priority date (37 CFR 1.492(e)).</p>																																			
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 2px;">Claims</th> <th style="text-align: left; padding: 2px;">Number Filed</th> <th style="text-align: left; padding: 2px;">Number Extra</th> <th style="text-align: left; padding: 2px;">RATE</th> </tr> </thead> <tbody> <tr> <td style="padding: 2px;">Total Claims</td> <td style="padding: 2px;">43</td> <td style="padding: 2px;">- 20 =</td> <td style="padding: 2px;">23</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center; padding: 2px;">X \$18.00</td> </tr> <tr> <td style="padding: 2px;">Independent Claims</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">- 3 =</td> <td style="padding: 2px;">0</td> </tr> <tr> <td></td> <td></td> <td></td> <td style="text-align: center; padding: 2px;">X \$84.00</td> </tr> <tr> <td colspan="3" style="padding: 2px;">Multiple dependent claim(s) (if applicable)</td> <td style="text-align: center; padding: 2px;">+ \$280.00</td> </tr> <tr> <td colspan="4" style="text-align: right; padding: 2px;">TOTAL OF ABOVE CALCULATIONS =</td> </tr> <tr> <td colspan="4" style="text-align: right; padding: 2px;">\$1304.00</td> </tr> </tbody> </table>				Claims	Number Filed	Number Extra	RATE	Total Claims	43	- 20 =	23				X \$18.00	Independent Claims	3	- 3 =	0				X \$84.00	Multiple dependent claim(s) (if applicable)			+ \$280.00	TOTAL OF ABOVE CALCULATIONS =				\$1304.00			
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\$1304.00																																			
<p>-- Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by <math>\frac{1}{2}</math>.</p>																																			
SUBTOTAL = \$1304.00																																			
<p>Processing fee of \$130.00 for furnishing the English translation later than ___ 20 ___ 30 months from the earliest claimed priority date (37 CFR 1.492(f)).</p>																																			
<p>Extension of Time fee in the amount of \$</p>																																			
TOTAL NATIONAL FEE = \$1304.00																																			
<p>Fee for recording the enclosed assignment (37 CFR 1.21(h). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property</p>																																			
TOTAL FEES ENCLOSED = \$1304.00																																			
Amount to be refunded \$																																			
Charged \$																																			
<p>a. <input checked="" type="checkbox"/> A check in the amount of \$1304.00 to cover the above fees is enclosed.</p> <p>b. <input type="checkbox"/> Please charge my Deposit Account No. ____ in the amount of \$____ to cover the above fees.</p> <p>c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 19-0089.</p>																																			
<p>NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.</p>																																			
<p>SEND ALL CORRESPONDENCE TO CUSTOMER NO. 7055 AT THE PRESENT ADDRESS OF: Bruce H. Bernstein GREENBLUM &amp; BERNSTEIN, P.L.C. 1941 Roland Clarke Place Reston, VA 20191 (703) 716-1191</p>		 <b>07055</b> <small>PATENT TRADEMARK OFFICE</small>																																	
		 <small>SIGNATURE Bruce H. Bernstein NAME</small> <small>29,027 Reg. No. 33,094</small> <small>REGISTRATION NUMBER</small>																																	

P21989.P02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant :A. MARUYAMA et al.

Appl. No :Not Yet Assigned  
(U.S. National Phase of PCT/JP00/05711)

I.A.Filed:August 24, 2000

For :METHOD OF DETECTING AND QUANTITATING MICROORGANISM HAVING  
SPECIFIC FUNCTION AND ITS GENE FROM NATURAL ENVIRONMENT, NOVEL  
16 SrRNA GEE DATA AND PROBES

**COVER LETTER ACCOMPANYING U.S. NATIONAL STAGE PATENT  
APPLICATION FILED UNDER 35 U.S.C. 371  
AND 37 C.F.R. 1.495**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

Sir:

Enclosed is a new National Stage patent application for filing in the U.S. Patent and Trademark Office under 35 U.S.C. 371 and 37 C.F.R. 1.495. The Declaration and Power of Attorney attached thereto are in unexecuted form. A properly executed Declaration and Power of Attorney will be filed within the period of time set in a Notification to be mailed by the United States Patent and Trademark Office.

Related to this, a correspondence address is provided in  
the unexecuted Declaration and Power of Attorney, and is as follows:

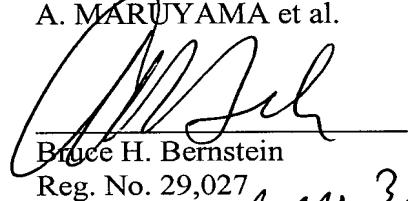
GREENBLUM & BERNSTEIN, P.L.C.  
1941 Roland Clarke Place  
Reston, Va. 20191

10/049626

JC13 Rec'd PCT/PTO 22 FEB 2002

If there any questions pertaining to this National Stage Application, please contact the undersigned.

Respectfully submitted,  
A. MARUYAMA et al.

  
Bruce H. Bernstein  
Reg. No. 29,027

February 22, 2002  
GREENBLUM & BERNSTEIN, P.L.C.  
1941 Roland Clarke Place  
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(703) 716-1191

PATENT APPLICATION SERIAL NO.

10/649626

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE  
FEE RECORD SHEET

02/28/2002 UEDUVIJE 00000083 10049626

01 FC:970                  890.00 0P  
02 FC:966                  414.00 0P

PTO-1556  
(5/87)